



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Tan et al.

Serial No.: 10/645,389

Filed: August 21, 2003

For: METHODS RELATING TO THE RECONSTRUCTION OF SEMICONDUCTOR WAFERS FOR WAFER-LEVEL PROCESSING (as amended)

Confirmation No.: 8099

Examiner: W. Brewster

Group Art Unit: 2823

Attorney Docket No.: 2269-5528US
(02-1052.00/US)

Notice of Allowance Mailed:

December 30, 2006

NOTICE OF EXPRESS MAILING

Express Mail Mailing Label Number: EL995990130US

Date of Deposit with USPS: March 24, 2006

Person making Deposit: Timothy Palfreyman

TRANSMITTAL LETTER

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

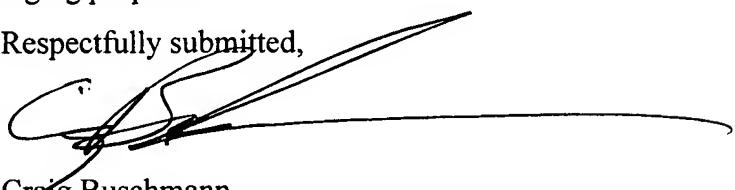
Sir:

Applicants submit herewith Part B - Fee(s) Transmittal for the above-captioned application and a check in the amount of \$1,715.00 in payment therefor plus five (5) copies of the patent when issued.

Also enclosed are Amendment Pursuant to 37 C.F.R. § 1.312(a) with attached Replacement Sheets (5 sheets) and Annotated Sheets Showing Changes (5 sheets); Comments on Statement of Reasons for Allowance; and Fee Addressee for Receipt of PTO Notices Relating to Maintenance Fees.

Applicants understand that no additional fees are required. However, if the Office determines that any comparison fees or other additional fees are required, the Commissioner is authorized to charge any such fees to TraskBritt Deposit Account No. 20-1469. A copy of this Transmittal Letter is enclosed for deposit account charging purposes.

Respectfully submitted,



Craig Buschmann
Registration No. 57,829
Attorney for Applicants
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: March 24, 2006

CB/dlm:eg

Enclosures: Part B - Issue Fee Transmittal

Check No. 22684 in the amount of \$1,715.00

Copy of Transmittal Letter

Amendment Pursuant to 37 C.F.R. § 1.312(a) (26 pages) with attached

Replacement Sheets (5 sheets) and Annotated Sheets Showing Changes
(5 sheets)

Comments on Statement of Reasons for Allowance (2 pages)

Fee Addressee for Receipt of PTO Notices Relating to Maintenance Fees (2 pages)



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COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Mail Stop Issue Fee
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner indicates:

[in claim 1, the features of lines 5-18, “placing a first semiconductor die having at least one alignment cavity on a surface thereof, such that the at least one alignment cavity of the first semiconductor die makes contact with the at least a first alignment droplet and is positioned by surface tension thereof; placing a second semiconductor die having at least one alignment cavity on a surface thereof, such that the at least one alignment cavity of the second semiconductor die makes contact with the at least a second alignment droplet and is positioned by

surface tension thereof; inducing the at least a first alignment droplet and the at least a second alignment droplet to at least partially solidify to maintain positions of the first semiconductor die and the second semiconductor die; and subsequently introducing an underfill material between the surfaces of the first and second semiconductor dice and the substrate to substantially fill a volume between each of the first and second semiconductor dice and the substrate, to extend laterally between the first and second semiconductor dice and to surround the at least a first alignment droplet and the at least a second alignment to form a reconstructed semiconductor wafer," cannot be combined from the prior art of record.

Sundstrom US Publication No. 2002/006523 A1 teaches forming an underfill before the aligning. Many references, for example, Sasaki, US Patent No. 6,053,395 teach the alignment between a die and a circuit board or substrate, not between two dies as enumerated.

Neither Val, US Patent No. 5,637,536 and nor Anthony, US Patent No. 4,499,655 teach alignment cavities in the mating dies as in claim 38, lines 5-6. Further neither one specifies the subsequent underfilling in lines 9-11.]

Applicants concur with the reasons as stated by the Examiner insofar as they comprise a summary, and are exemplary and not limiting. However, the independent claims as allowed include other and different language than that specified by the Examiner, and the allowed dependent claims include other and further features and elements. Accordingly, the scope of the claims must be determined from the literal language of each as a whole, as well as equivalents thereof.

Respectfully submitted,



Craig Buschmann
Registration No. 57,829
Attorney for Applicants
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

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